

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Treasure County Conservation District, PO Box 288, Hysham, MT 59038
2. Type of action: Conservation District Application to Change Water Reservation (43P 30068130)
3. Water source name: Bighorn River
4. Location affected by project: Section 1 and 2 T4N R34E
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The applicant proposes to authorize the producer (Circle B LLC) to use 1.9 CFS up to 235 AF/year of the Treasure County Conservation District water reservation. The water would be used to irrigate 63 acres in the NW Section 1 and 24 acres in the E2NE Section 2 T4N R34E in Treasure County using center pivot sprinklers. The benefit would be to allow the Conservation District to fulfill its obligation to provide water for future irrigation projects. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

United States Department of Agriculture Natural Resources Conservation Service
Montana Natural Heritage Program
United State Fish and Wildlife Service
Montana Department of Fish, Wildlife and Parks
Montana Department of Environmental Quality

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity – Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No Impact.

This reach of the Bighorn River is not identified as a chronically or periodically dewatered stream.

Water quality – Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No Significant Impact.

This reach of the Bighorn River has a water quality classification of 5 indicating that some uses are threatened or impaired. The impairment is with respect to drinking water and the cause of impairment is lead and mercury from unknown, probably natural sources. The proposed use is irrigation and will not add metals to the river. The project uses center pivot sprinklers and high efficiency irrigation reduces the likelihood of water quality degradation, because there is little to no return flow.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: No Significant Impact.

The project includes water for leaching of salts through the soil profile that could end up in groundwater. However, soils of the region are not very rich in salts.

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: No Impact.

No new diversion works will be constructed on the Bighorn River. The proposed project uses an existing diversion structure. No changes will impact the channel or riparian areas.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”

Determination: No Significant Impact.

According to the Montana Natural Heritage Program website, the Bureau of Land Management (BLM) lists the Spiny Softshell, Burrowing Owl and Sauger as sensitive. There are no threatened or endangered species in the area. The Bald Eagle is listed as a species of special status. The Bureau of Land Management lists the persistent-sepal yellow-cress as a plant species of concern. This project will create no barriers and no change in available habitat.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No Impact.

The only wetlands in the area are emergent occasional or seasonal wetlands associated with riparian areas along the Bighorn River.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: No Impact.

There are no ponds included in this proposed project.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: No Significant Impact.

The primary soils in the project area are McRae and Havre Loams. These are silty to clayey loams that are generally well drained and non-saline to very slightly saline. The slopes in the area are generally low but occasionally reach 8%.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: No Significant Impact.

The area of this project has been used for agriculture in the past and has little native vegetation. Installation of sprinkler system, pipes and pumps may provide an opportunity for spread of noxious weeds. It will be the responsibility of the owner to monitor and control weeds.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No Impact.

The project is for sprinkler irrigation of agricultural land and will not impact air quality.

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

Determination: Not Applicable.

The project is not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: None Recognized.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: There are no known locally adopted environmental plans or goals.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No Significant Impact.

The area is surrounded by roads and has been historically used for agriculture. There are no nearby recreational or wilderness areas. Access to the river for fishing will not be impacted.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No Impact.

The project is for sprinkler irrigation of agricultural land.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No X___ *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: Not Applicable.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No Significant Impact.
- (b) Local and state tax base and tax revenues? No Significant Impact.
- (c) Existing land uses? No Significant Impact.
- (d) Quantity and distribution of employment? No Significant Impact.
- (e) Distribution and density of population and housing? No Significant Impact.
- (f) Demands for government services? No Significant Impact.

(g) Industrial and commercial activity? No Significant Impact.

(h) Utilities? No Significant Impact.

(i) Transportation? No Significant Impact.

(j) Safety? No Significant Impact.

(k) Other appropriate social and economic circumstances? No Significant Impact.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: No secondary impacts of this project were recognized.

Cumulative Impacts: There are no pending applications or non-perfected permits issued in this area. The project does not appear to pose any cumulative adverse impacts.

3. *Describe any mitigation/stipulation measures:* None

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:* The only alternative to the project as proposed would be a no action alternative. The no action alternative would have no impacts. The no action alternative denies the conservation district and the producer the benefit of irrigation of agricultural property.

PART III. Conclusion

1. *Preferred Alternative:* Issue a change authorization if applicant proves the criteria in 85.2.402 MCA are met.

2. *Comments and Responses:* None.

3. *Finding:*
Yes___ No X___ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant adverse impacts associated with the project were identified. Therefore, an EA is the appropriate level of investigation and an EIS is not required.

Name of person(s) responsible for preparation of EA:

Name: Mark Elison

Title: Hydrologist

Date: 1/22/2014